

Akiko SHINOHARA et al., S.N. 10/521,978
Page 7

Dkt. 1141/73755

RECEIVED
CENTRAL FAX CENTER

APR 27 2007

REMARKS

The application which is a national stage under 35 U.S.C. §371 has been reviewed in light of the Office Action dated January 30, 2007. Claims 1-15 are pending. By this Amendment, claims 12 and 13 have been amended to correct translation errors therein. Accordingly, claims 1-15 are presented for reconsideration, with claim 1 being the sole pending claim in independent form.

Claim 13 was objected to as having informalities. The drawings were objected to under 37 C.F.R. §1.83(a) as purportedly failing to show each feature of the claimed invention, more specifically, in claim 12. Claims 10 and 12 was rejected under 35 U.S.C. §112, second paragraph, as allegedly indefinite.

By this Amendment, claims 12 and 13 have been amended to correct translation errors therein.

Regarding claim 10, it is noted that claim 10 refers to "the operating device" and not to "the operating devices". Antecedent basis for "the operating device" can be found in claim 1 from which claim 10 depends.

Withdrawal of the rejection under 35 U.S.C. §112 and the objections is respectfully requested.

Claims 1, 2, 4-6, 8-11 and 13 were rejected under 35 U.S.C. §102(b) as purportedly anticipated by U.S. Patent No. 4,642,621 to Nemoto et al. Claim 12 was rejected under 35 U.S.C. §103(a) as purportedly unpatentable over Nemoto in view of U.S. Patent No. 6,627,871 to Iwamoto et al. Claims 14 and 15 were rejected under 35 U.S.C. §103(a) as purportedly unpatentable over Nemoto in view of U.S. Patent No. 6,215,479 to Matsui. Claims 3 and 7 were

Akiko SHINOHARA et al., S.N. 10/521,978
Page 8

Dkt. 1141/73755

rejected under 35 U.S.C. § 103(a) as purportedly unpatentable over Nemoto in view of U.S. Patent No. 5,803,914 to Ryals et al.

Applicant has carefully considered the Examiner's comments and the cited art, and respectfully submits that independent claim 1 is patentable over the cited art, for at least the following reasons.

This application relates to a medical image diagnosis apparatus capable of setting imaging conditions (for example, imaging position and range, a certain number of instances of image reconstruction, image reconstruction positions, a scanner angle, etc.) to a portion of a subject, when tomographic images are formed by using an image of the whole of a subject and a scanogram image of the subject (for example, when images are formed by using an X-ray CT apparatus, an MRI apparatus, etc.). In conventional systems in which an operator can use a mouse to change an imaging condition, when one of the frames, lines and so on corresponding to one of the imaging conditions which the operator wishes to change is directly operated with the mouse to change the imaging condition, there is a possibility of some of the other imaging lines, frames and so on existing at a nearby position being inadvertently operated upon. Applicant devised improvements to overcome this problem.

For example, claim 1 of the present application is directed to an improved medical image diagnosis apparatus comprising a first display device, a second display device, a display control device for the first display device and the second display device, and an operating device. The first display device can display the whole image and the imaging conditions or variably inputting the imaging conditions by displaying the whole image and the imaging conditions. The second display device can extract some of the imaging conditions and display the extracted condition.

Akiko SHINOHARA et al., S.N. 10/521,978
Page 9

Dkt. 1141/73755

The operating device can variably input the imaging conditions displayed in a display image frame on the second display device.

Nemoto, as understood by Applicant, proposes an image display system for computerized tomographs wherein two different CT images are stored respectively in a primary image memory and a secondary image memory, the secondary image is inset in a desired rectangular region in the main image memory so that the two images can simultaneously be displayed, and the data for the two images to be displayed can be independently subjected to various types of processing in real time, such as window or level processing, blinking for flashing displayed image data pixels in a particular CT value zone, and reverse video operations.

However, Nemoto does not teach or suggest a medical image diagnosis apparatus comprising (a) a first display device capable of displaying the whole image and imaging conditions or variably inputting the imaging conditions by displaying the whole image and the imaging conditions, (b) a second display device of extracting some of the imaging conditions and displaying the extracted condition, and (c) an operating device of variably inputting the imaging conditions displayed on the second display device, as provided by the subject matter of claim 1 of the present application.

Primary image 100 shown in Nemoto, Fig. 7 and secondary image 110 in Nemoto, Fig. 8 correspond to two different images displayed on the same screen [see Nemoto, Fig. 7(b)] using image data from two different image memories. Accordingly, elements 100 and 110 in Nemoto are both images instead of imaging conditions, and element 110 is not extracted from element 100. In other words, Nemoto does not teach or suggest "displaying the whole image and the imaging conditions on the first display device" and "extracting some of the imaging conditions

Akiko SHINOHARA et al., S.N. 10/521,978
Page 10

Dkt. 1141/73755

displayed on the first display device and displaying the extracted conditions on the second display device", as provided by the subject matter of claim 1 of the present application.

The subject matter of the present claim 1 can avoid the problem that in a case where a plurality of imaging conditions is designated, the conditions are operated inadvertently on other lines, frames, and so on, at a nearby position. The system of Nemoto cannot solve this problem.

The other cited references do not cure the deficiencies of Nemoto.

Iwamoto, as understood by applicant, proposes an optical position detecting device for optically detecting a position indicated by an indicator within a predetermined region on a computer's display screen. Iwamoto was cited in the Office Action as purportedly proposing a display apparatus where information is displayed in a parallelepiped configuration.

Matsui, as understood by applicant, proposes an apparatus for displaying an image with a pointing character. Matsui was cited in the Office Action as purportedly proposing a display apparatus comprising a touch panel and an operating device comprising a pointer.

Ryals, as understood by applicant, proposes a system for acquisition, processing and display of gated SPECT imaging data for use in diagnosing Coronary Artery Disease (CAD) in nuclear medicine. Matsui was cited in the Office Action as purportedly proposing that the displayed information includes imaging sequence ordinal numbers for setting the imaging conditions with respect to each of a plurality of imaging sequences and that the desired order of execution of the plurality of imaging sequences is designated by inputting numeric values

However, applicant does not find teaching or suggestion of a medical image diagnosis apparatus comprising (a) a first display device capable of displaying the whole image and imaging conditions or variably inputting the imaging conditions by displaying the whole image

Akiko SHINOHARA et al., S.N. 10/521,978
Page 11

Dkt. 1141/73755

and the imaging conditions, (b) a second display device of extracting some of the imaging conditions and displaying the extracted condition, and (c) an operating device of variably inputting the imaging conditions displayed on the second display device, as provided by the subject matter of claim 1 of the present application.

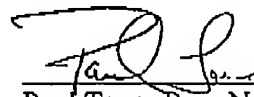
Accordingly, for at least the above-stated reasons, Applicant respectfully submits that independent claim 1 and the claims depending therefrom are patentable over the cited art.

In view of the remarks hereinabove, Applicant submits that the application is now in condition for allowance, and earnestly solicits the allowance of the application.

If a petition for an extension of time is required to make this response timely, this paper should be considered to be such a petition. The Patent Office is hereby authorized to charge any fees that are required in connection with this amendment and to credit any overpayment to our Deposit Account No. 03-3125.

If a telephone interview could advance the prosecution of this application, the Examiner is respectfully requested to call the undersigned attorney.

Respectfully submitted,



Paul Teng, Reg. No. 40,837
Attorney for Applicant
Cooper & Dunham LLP
Tel.: (212) 278-0400